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ABSTRACT

This document presents an integrated unit plan on snakes targeting second grade students. Objectives of the unit include developing concepts of living things, understanding the contribution and importance of snakes to the environment, and making connections between different disciplines. The unit integrates the topic of snakes into the areas of science, mathematics, social studies, and language arts. (Contains 18 references.) (YDS)

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ED 457 009

Snakes: An Integrated Unit Plan

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Grade Level: 2nd

Theme: The theme of this unit, "Snakes," is especially appropriate for children at this level because they are fascinated with animals and are often highly motivated to explore their immediate environment. The unit can be adapted for children at other primary and lower intermediate grade levels. It is assumed that the children will be acquainted with their local environment and that they have previously had some introductory study of their local neighborhood. Other assumptions include the following: The children have done some work with grids. The children have done some work with graphs. The children have done some work with geometric shapes. The children have some experience with working at a computer.

General Objectives:

To help children broaden their concepts of living things as they learn more about snakes.

To help children appreciate the contributions and importance of snakes to the environment.

To help children to make connections between mathematics, science, social studies, and language through the study of snakes.

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Introductory Science Lesson:

General Objectives:

To promote an interest in the study of snakes.

To prepare the children for observing a snake in a classroom learning center.

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To prepare the children for observing a snake in a classroom learning center.

Estimated Time: 1 period

Behavioral Objective:

After being introduced to snakes, the children will list major characteristics of snakes.

Materials:

Photographs of snakes, preferably an actual size and an enlarged version
Film, video, or CD-ROM showing various snakes (Teachers will need to determine the best resources that are available in their local school media centers and community libraries.)
Large chart paper and markers

General instructional materials, equipment, and background information for the teacher for this and future science lessons:

Recordings of snakes and environmental sounds
A wide selection of children's informational and story books focusing on snakes from the school and public libraries
Maps of the world and the United States
Classroom computer with CD-ROM, connections to the Internet, printer
LCD projector
Encarta Encyclopedia CD-ROM
Grolier Encyclopedia CD-ROM
Compton's Encyclopedia CD-ROM
ZOO Explorers CD-ROM (Compton's New Media)

Live nonpoisonous snake

Terrarium for snake

Information on caring for a snake (such as *Giant Snakes and Non-Venomous Snakes in the Terrarium* by Klaus Griehl)

Food for a snake (check with local pet stores or farms)

Information on snakes common to the local area

Procedure:

1. Remind the children that their last unit was on the environment. Ask them to recall some activities from that unit.
2. Begin with a class discussion on snakes
   --Ask if anyone has ever seen a snake
   --Ask the children what they think snakes look like
   --Ask how big or how long the children think snakes are
   --Ask the children if they know what happen to snakes as they grow (molt)
3. Show the children a picture of snakes. The picture will help the children to confirm or modify their concept of what snakes look like.
4. Ask the children if they think it might be possible to keep a snake in the classroom.
5. Explain that the class will be studying snakes, and as a part of the study, the children will be observing a snake. Explain that they will need to learn as much as possible about snakes in order to care for a snake. Also, tell the students they will now view a film (video, CD-ROM) that will give them some important information about snakes.
6. Introduce the film, reminding the children to watch carefully and to pay close attention to what snakes need and how and where they live.
7. Show the film.

8. After the film, ask the children some questions:
   --In the film, we learned what snakes need in order to grow. What are some of the things you remember? (List the contributions on a chart to be placed next to the snake tank.)
   --Where are some places that snakes live? Why?
9. Have the children list major characteristics that they have learned about snakes.
10. Tell the children that the next science activity will be to prepare a tank to keep a snake in for the classroom.

(Steps 4, 5 and 10 and Lesson 2 may be omitted if the teacher does not feel comfortable around snakes or if there is no safe place to release the snake after the study.)

Science Lesson 2:

General Objective:

To prepare a safe environment in the classroom in which a snake could live.

Estimated Time: 1 period

Behavioral Objectives:

The children will understand what is needed to make a safe environment in a classroom in which a snake can live.

The children will help to prepare the safe environment.

Materials:

A sturdy terrarium approximately 24x32x32 inches

A cover with a lock or bolt and plastic vents

A heating pad to be placed under part of the terrarium for heat

Fluorescent light tubes in part of the terrarium

Fresh water, slightly warmed

A water vaporizer to spray the snake

Newspapers or blotting paper for the bottom of the terrarium

Rocks or other objects on which the snake can climb

Food (live mice, live fish [for a water snake])

Procedure:

1. Before bringing the snake into the classroom, talk with the children about not frightening the snake.
2. Let the children help to prepare the terrarium. Explain the terrarium to the children, especially the heating pad and the lights that could burn the students and the snake.
3. Explain the feeding of the snake as an everyday part of life. Remind the children that they saw snakes eating live animals on the film. (The teacher can feed the snake before or after school to avoid upsetting any children.)
4. Introduce the snake to the terrarium, having the children observe from a distance for the next few days.
5. Explain to the children that, for safety reasons, only the teacher will feed the snake and clean the terrarium.
6. Let the children observe the snake for a few minutes and then have them write down their impressions.
7. Set aside an area near the terrarium where the children can go each day to sketch their observations of the snake and/or to write down their observations of the snake.

Science Lesson 3:

General Objective:

To be able to classify snakes as either poisonous or nonpoisonous.

Estimated Time: 1 teaching period and time throughout the day

Behavioral Objectives:

The children will identify poisonous and nonpoisonous snakes.

The children will make a list of poisonous and nonpoisonous snakes.

Materials:

Bookmarked Internet sites:

http://www.reptile-gardens.com/reptile/reptile.html

http://www.lpzoo.com/animals/herps/herpslist.html

http://foves-retina.net/~gecko/herps/

http://muggy.gg.caltech.edu/~bena/snakes.html

http://www.castyournet.com/snakeman/index.html

http://www.selu.com/~bio/wildlife/gallery.html#Reptiles

Procedures:

1. Discuss the differences between poisonous and nonpoisonous snakes.
2. Tell the children that they are going to find poisonous and nonpoisonous snakes on the Internet.
3. Demonstrate what the students will need to do at a bookmark.
4. The children will go in pairs throughout the day to the bookmarks and make a list of poisonous and nonpoisonous snakes.
5. The children will record their observations of the snake for the day.

Science Lesson 4:

General Objective:

To recognize snakes common to the local area.

Estimated Time: 1 period

Behavioral Objectives:

The children will list poisonous and nonpoisonous snakes common to the local area.

The children will discuss the environment in which the snakes live.

Materials:

A map of the local area

Information on snakes common to the local area (Teachers will need to gather information from the local library or marine education center. In South Mississippi, the J. L. Scott Marine Education Center can supply the information needed.)

Pictures of snakes

Procedure:

1. Discuss with the children their lists of poisonous and nonpoisonous snakes.
   --What is the difference between a poisonous and nonpoisonous snake?
   --Are there any characteristics to look for to tell whether the snake is poisonous or nonpoisonous?
2. Discuss information learned about the local environment from previous studies (temperature, soil, trees, etc…).
3. Show the class pictures and names of snakes common to the local area.
4. Discuss the environmental needs of these snakes

--What do the snakes need to eat?

--What temperatures are best for them?

--Where do they make their homes?

5. Discuss whether the snakes are poisonous or nonpoisonous.

   --Can the children tell by looking at them?

6. Have the children complete a class chart of the poisonous and nonpoisonous snakes common to the local area.
7. Have the children continue to look at bookmarks on the Internet if they did not finish yesterday.
8. The children should record their observations of the snake for the day.

Social Studies Lesson 1:

General Objective:

To understand that a map shows how a place and the objects in that place look from above.

Estimated Time: 1 period

Behavioral Objectives:

The children will create maps of objects in the classroom.

The children will create a map of the school and its neighborhood, including snakes common to the area.

Materials:

Maps of the United States

Globes

Paper

Colored pencils or crayons

General instructional materials, equipment, and background information for the teacher:

As with the science lessons, certain materials will be required throughout the social studies lessons:

A computer with a color monitor and color printer

LCD projector

Social Studies Software (Neighborhood Map Machine, Tom Snyder Productions, 1997)

Procedure:

1. Discuss a "bird's eye view" with the children.
   --Does anyone know what a "bird's eye view" is?
   --Why do we call it a "bird's eye view"?
2. Ask each student to collect 5 small objects in the classroom and place them on the floor. Have the children look down on the objects and draw pictures of how the objects look from straight overhead.
3. Share and discuss.
   --Why did the children not include the sides and the bottoms of the objects in their drawings?
   --Did they draw the objects exactly the way the objects were spaced on the floor?
4. Show maps and globes of familiar and unfamiliar places. Discuss.
5. Divide the students into groups of 2-3 to create a map of the school and its neighborhood.
   --Each group gets a piece of paper

--Tell the children that they are to imagine that they are flying over the school and its neighborhood. If they took a photograph of what they saw below them, what would it look like?

--Ask them to include some of the snakes studied in the science lessons.

--Have them draw a map of the area using colored pencils or crayons.

--Share, compare, and discuss (especially why they placed the snakes where they did)

Social Studies Lesson 2:

General Objective:

To understand how to use a map key.

Estimated Time: 1 period

Behavioral Objectives:

The children will explain map symbols.

The children will use a map key to read a map.

The children will work in groups to plan a community using map symbols.

Materials:

Neighborhood Map Machine software, Tom Snyder Productions, 1997 (or another map making software)

Symbols from magazines and signs

Old magazines

Scissors

Glue

Procedure:

1. Discuss how symbols are like the real objects. Discuss how symbols are different from the real objects. Discuss why we use symbols.
   --Show the children symbols from magazines and signs such as a McDonald's logo, a Nike logo, a road sign, etc…
2. Post copies of symbols from magazines, signs, etc… on a bulletin board. Ask the children to cut pictures from magazines and post the pictures next to the appropriate symbols. Discuss.
3. Review how a map shows our world and neighborhood.
4. Introduce and demonstrate Neighborhood Map Machine - Create a Map software.
5. Have the students get in their groups from lesson 1 to plan a community that includes at least ten symbols and why they chose them (Example: buildings, roads, parks, trees, parking lots, **snakes**, and other small objects)

Social Studies Lesson 3:

General Objective:

To create a map of a community.

Estimated Time: 1 period

Behavioral Objective:

The children will work in groups to create a map of a community.

Materials:

Computer, monitor, printer

Neighborhood Map Machine - Create a Map software

Procedure:

1. Before the groups get started, review maps, map keys, map symbols. Ask if there are any questions about the groups' communities.
2. If the children cannot find a symbol to use for the snakes in their communities, tell them that they can draw the symbol and the snakes on their printed copies of the maps.
3. Have one group at a time take their plans and recreate them using the computer program.

   --Observe the groups to see that they understand map symbols, keys, and the software.
4. Groups waiting to use the computer can continue to plan their communities, or they can observe the snake in the classroom terrarium.
5. Each group will print a copy of the map and write a description of the community to give to the teacher.

Social Studies Lesson 4 or Enrichment Activity:

General Objective:

To create 3D versions of the maps created in the previous activity.

Estimated Time: 1-2 periods

Behavioral Objective:

The children will use The Neighborhood Map Machine - Create a Map software to create a 3D community in which snakes common to the local area could live.

Materials:

Large Neighborhood Map Machine symbols printed from the Print Goodies menu

Neighborhood Map Machine large floor map grid printed for each group (4x4 or 6x6 size)

Neighborhood Map Machine 3D cutouts

Rubber snakes

Heavy stock paper

Glue

Scissors

Procedure:

1. Have one group at a time print 3D models of their buildings and objects from their map and reproduce the buildings and objects on a heavy stock paper.
2. Have the children cut, fold, and paste to create their 3D objects.
3. Each group will recreate roads, parks, lakes,… on the large grid paper using the grids from their map as a guide.
4. The children will add buildings and other 3D objects (**snakes**, etc…) to the grid.
5. The children will display their communities in the classroom or other space arranged by the teacher.

Mathematics Lesson 1:

General Objective:

To notice the different patterns on the skins of snakes.

Estimated Time: 1-2 periods

Behavioral Objectives:

The children will discuss the different patterns on the skins of snakes.

The children will explore geometric patterns on **Introduction to Patterns** software (Sunburst).

Materials:

Pictures of snakes

Introduction to Patterns software (Sunburst)

General instructional materials, equipment, and background information for the teacher:

As with the science and social studies lessons, certain materials will be needed throughout the mathematics lessons:

Computer with color monitor and color printer

LCD projector

Introduction to Patterns software (PreK-1) by Sunburst

Graphers (K-4) software by Sunburst

Pattern blocks

A wide selection of children's informational and story books about snakes

Procedure:

1. Discuss what the children see when they look at various pictures of snakes
   --The size
   --The fangs
   --The color

2. Ask if the children can describe the snakes' skins

   --The color

   --The designs

3. Discuss patterns

   --What makes a pattern a pattern?

   --How many different patterns did you see in the pictures of the snakes?

   --Give me some words that describe the patterns you saw.

4. Demonstrate the **Introduction to Patterns** software.

   --Tell the children that each group will be assigned a journal.

   --Let them watch the introductory movie of the squares with different patterns on each side.

   --Click on the skateboarder and let the children see how the tile layer put a stripe of blue triangle and red rhombuses on a wall, matching the pattern on the skateboarders T-shirt.

   --Ask why the patter disappeared from the skateboarders T-shirt.

   --Encourage the children to look for geometric patterns around the classroom or school. (Clothing fabric, patterns of bricks, floor tiles, etc…).

5. Divide the class into groups and let the groups do the **Through** activities in the geometric patterns. Have each group record their work in the journal.

   --Ask the children orally for or have them record in the journals a description of the shapes in the pattern.

   --See if they can build their patterns in different directions.

   --Ask if the pattern reminds them of anything they have seen before.

6. While groups are waiting for the computer, they can observe the snake in the classroom or read the books about snakes.

Mathematics Lesson 2:

General Objective:

To continue to explore geometric patterns.

Estimated Time: 1-2 periods

Behavioral Objectives:

The children will apply their knowledge and creativity to construct geometric patterns.

The children will describe patterns.

The students will make snake patterns.

Materials:

Introduction to Patterns software (Sunburst)

Pattern blocks

Sentence strips or paper about 3" wide

Pictures of snakes

Camera

Film

Procedure:

1. Open the **Introduction to Patterns** software and go to **Open-ended Build and Play**.
2. Discuss the three different sets of blocks found there. One set is similar to the pattern blocks the children will be using in the classroom. Discuss the manes of the shapes: square, trapezoid, equilateral triangle, hexagon, blue rhombus and tan rhombus. Discuss that another set, with the same shapes, is

wood-grained. Discuss that the third set of blacks includes a square, a rectangle, and an equilateral triangle in two fabric designs.

--Let the children name and describe each shape

--List the names on the board next to the shape

3. Tell the children that while one group works at the computer to explore interesting shapes and patterns, the other groups will be making "snakes" by lining up pattern blocks along a sentence strip to form a pattern.

   --Ask the children at the computer and those with the blocks to imagine that they are going to make snake patterns similar to the patterns on the real snakes they have seen in the pictures in the classroom.

   --Have them experiment over and over with various shapes and patterns.

4. The teacher can model both activities before the children begin.
5. Ask the students orally or have them record in their journals what blocks they chose to make the pattern on the snake's skin.

   --Ask if the pattern continues all the way along the snake's body.

   --Ask if the snake has a pattern that repeats.

   --Ask how the various blocks fit together.

   --Ask them what would come next and why if their snake were longer.

6. Have the students print their "snakes" from the software. Take a picture of each groups' "snake" made with the pattern blocks. Include the printouts and the photographs on a bulletin board display.
7. Let each group talk about their snakes.
8. If groups finish early, they may observe the snake in the classroom or read books about snakes.

Mathematics Lesson 3:

General Objective:

To experiment with shapes to change, create, describe, and record a pattern.

Estimated Time: 1-2 periods

Behavioral Objectives:

The children will listen to a story.

The children will fill in a triangle grid with block shapes to create a "snake."

Materials:

The story "Two Green Snakes" from the **Introduction to Patterns** software (Sunburst)

Copies of Green Snake master (from software) on light green paper

Pattern blocks

Copies of shapes masters (from software) for triangles, trapezoids, hexagons, blue rhombuses

Paper

Glue

Procedure:

1. Read aloud the story "Two Green Snakes" from the software.
   --Talk about the animals in the story, as well as other animals whose body coverings have markings.

2. Have the children use their copies of the snake master as a work mat. Point out that the snake's body is made up of green triangles and that this pattern can be changed as if the snake is wearing a new coat.
3. Have the children replace some of the triangles on the snake's body with other block shapes--using the grid lines as a guide.
4. Have the children record their patterns directly onto their work mats by gluing paper shapes in place.
5. Ask the children to discuss their "snakes."
   --What shapes did you use in your pattern?
   --How did you know the blocks would fit there?
   --How do the shapes and colors repeat in your pattern?
6. Have the students name their snakes. The name should describe the patterns they chose.

Mathematics Lesson 4:

General Objective:
To make a graph of poisonous and nonpoisonous snakes common to the area.

Estimated Time: 1-2 periods

Behavioral Objectives:
The children will know that a graph can be used to collect and describe data and sort data by attribute.
The children will make a graph on **Graphers** (or other software) of poisonous and nonpoisonous snakes common to the local area.

Materials:

List of snakes from science lesson 4

Graphers software (K-4, Sunburst)

Procedure:

1. Discuss with the class the class chart of local poisonous and nonpoisonous snakes from a previous science lesson.
2. Tell the children that together they are going to make a graph of the information on the chart.
3. Demonstrate the **Graphers** software (or other graph making software).
   --What kinds of graphs do the children see?
   --What is the same or different about each of the graphs?
   --What kinds of information can be recorded on graphs?
4. Divide the class into groups.
5. Have each group decide whether they want to make a line graph, table, pictograph, bar graph, or circle graph of the snakes.
   --Encourage each group to try a different graph.
6. The groups will take turns working at the computer. Those waiting can observe the snake in the classroom or read some of the books about snakes.
7. Display the completed graphs in the classroom.

Language Lesson 1:

General Objective:

To involve the children in a directed listening experience.

Estimated Time: 1 period

Behavioral Objective:

The children will listen to a book about snakes (*Outside and Inside Snakes* by Sandra Markle).

The children will observe characteristics of snakes and what the snakes need in order to live.

The children will continue to develop listening skills.

Materials:

Outside and Inside Snakes by Sandra Markle

General instructional materials, equipment, and background information for the teacher:

As with the science, social studies and mathematics lessons, certain materials will be required throughout the language lessons:

A wide selection of children's informational and story books focusing on snakes from the school and public libraries

Language is already tied in to the unit in the other areas of study:

Science: The children keep a journal of their observations of the snake in the classroom.

Social Studies: The children recognize and talk about symbols that are used to represent real objects.

Mathematics: The children keep journals of patterns that they create and their descriptions of the patterns. They listen to a story and create their own patterns.

Procedure:

1. Read the book *Outside and Inside Snakes* by Sandra Markle.

2. As the children listen to the book, let them examine the pictures to observe characteristics of snakes and the things the snakes need in order to live.
3. Ask the students to tell some things about snakes

   --How do snakes move?

   --How do snakes eat?

   --How does a snake's shape help to keep it safe?

   --Why does a snake spend a lot of time doing nothing?

   --How would a snake's skin feel to you?

   --Why does a snake shed its skin?

   --What is under a snake's skin?

   --For what do snakes use their senses?

   --Why does a snake stick out its tongue?

   --What is a snake's egg like?

Language Lesson 2:

General Objective:

To have the children experience writing as a positive, creative, and enjoyable way to express their ideas.

Estimated Time: 2-3 periods

Behavioral Objective:

The children will listen to a fictional story based on a true story about snakes (*A Snake Mistake* by Mavis Smith).

The children will write a comic book based on the experience of a snake.

Materials:

A Snake Mistake by Mavis Smith

Paper (white and colored)

Markers, crayons

Computer with printer (if needed)

Procedure:

1. Read the book *A Snake Mistake* by Mavis Smith. Tell the students that the story is based on a true story.
2. Discuss the story with the children:
   --Has anyone had an animal that made a mistake similar to the snake's?
   --What would you have done with the snake?
   --Why did the snake make the mistake?
3. Discuss the art in the book with the children.
4. Discuss comic books with the children:
   --How is a comic book different from a storybook?
   --How can you show the characters speaking in a comic? (balloons coming out of the character's mouth)
5. Tell the children that each of them will write a comic book about a snake making a mistake.
6. Have the children brainstorm for ideas and then begin writing their books.
   --They can write or type the words for their books
   --Encourage the children to be unique and creative in their writing
7. The teacher can bind the books in some way when the children are finished with them.

Language Lesson 3:

General Objective:

To have the children enjoy poetry.

Estimated Time: 1 period

Behavioral Objectives:

The children will listen to a poem about a snake.

The children will practice reciting the poem.

The children will write their own poem about a snake.

Materials:

The poem "Herman the Snake" (adapted from "Herman the Worm")

Paper and pencils

Procedure:

1. Read the poem "Herman the Snake" and do the hand motions.
   -- Discuss why Herman was skinny, fat, and skinny again.
   -- Discuss what happens to a snake's body when he eats.
2. Read the poem again and have the children try to say it with you.
   --Do this several times
3. Have the children write their own poem about a snake.

Language Lesson 4:

General Objective:

To have the children do a focused writing assignment.

Estimated Time: 1 period

Behavioral Objective:

The children will write about what they have learned about snakes.

Materials:

Topic Sentences

Paper and pencils

Procedure:

1. Put a list of topic sentences on the board. Tell the children to choose one.
   --Let me tell you about_____
   --Have you ever wondered about _____
   --Have you ever wondered why _____
   --I just learned facts about _____
   --Let me tell you how _____and _____ are alike
   --Let me tell you how _____ and _____ are different
   --Many changes happen to _____ snakes as they grow
   --People used to think _____, but now we know _____
2. Tell the children to think about what they have learned about snakes.
3. Have the children write about their topic sentences and then share their work with a partner.

Resources

Aliki. (1978). The twelve months. NY: Greenwillow Books.

Compton's Reference Collection 3.1 [Computer software]. (1996). USA: Compton's NewMedia.

Zoo Explorers 3.1. [Computer software]. (1995). USA: Roaring Mouse Entertainment, Inc.

Daly, Kathleen N. (1980). A child's book of snakes, lizards & other reptiles. Garden city, NY: Doubleday & Company, Inc.

Gobs of garters. Ranger Rick. (1999). [On line]. Available: http://www.nwf.org/nwf/rrick/1999/jun99/garter.html

Griehl, Klaus. (1982). Giant snakes and non-venomous snakes in the terrarium. Woodbury, NY: Barron's.

Herring, Angel. (1998). Herman the worm. Available: http://www.teachers.net/lessons/posts/429.html

J. L. Scott Marine Education Center & Aquarium. (1999). Common non-poisonous snakes. (No. 21). [Leaflet]. Biloxi, MS: Margaret B. Howell.

J. L. Scott Marine Education Center & Aquarium. (1999). Common sense and snakebites. (No. 15). [Leaflet]. Biloxi, MS: George L. White.

J. L. Scott Marine Education Center & Aquarium. (1999). Physiography and watersheds of Mississippi. [Leaflet]. Biloxi, MS.

Lois Edwards Educational Design. (1999). Graphers. [Computer software]. Pleasantville, NY: Sunburst communications.

Markle, Sandra. (1995). Outside and inside snakes. NY: Simon & Schuster Children's Publishing Division.

Rattlers!. Ranger Rick. (1998). [On line]. Available: http://www.nwf.org/nwf/rrick/1998/may98/rattle.html

Seidensticker, John. (ed.). (1995). Dangerous animals. San Francisco, CA: The Nature Company Discoveries Library published by Time-Life Books.

Smith, Mavis. (1991). A snake mistake. Singapore: HarperCollins *Publishers*.

Stearns, Peggy H. (1999). Neighborhood Map Machine. [Computer software]. Watertown, MA: Tom Snyder Productions.

Tenth Planet. (1999). Introduction to Patterns. [Computer software]. Pleasantville, NY: Sunburst Communications.

Yep, Laurence. (1994). The boy who swallowed snakes. NY: Scholastic Inc.

Zim, Herbert S., & Smith, Hobart M. (1956). Reptiles and amphibians. NY: Golden Press.

Appendix

Herman the Snake

Sitting on the sidewalk
Chewing my bubble gum (pretend to chew)
Playing with my yoyo-WOO WOO (act like you are playing with a yoyo)
And along comes Herman the snake. (do your index finger like a crawling snake)
And he was this big. (hold your fingers a few inches apart)
I said, "Herman, what happened?"
And he said, "I ate an apple."

Sitting on the sidewalk
Chewing my bubble gum (pretend to chew)
Playing with my yoyo-WOO WOO (act like you are playing with a yoyo)
And along come Herman the snake. (do your index finger like a crawling snake)
And he was this big. (hold your hands a foot apart)
I said, "Herman, what happened?"
And he said, "I ate a banana."

Sitting on the sidewalk
Chewing my bubble gum (pretend to chew)
Playing with my yoyo-WOO WOO (act like you are playing with a yoyo)
And along comes Herman the snake. (do you index finger a crawling snake)
And he was this big. (hold your hands about 4 feet apart)
I said, "Herman, what happened?"
And he said, "I ate a watermelon."

Sitting on the sidewalk
Chewing my bubble gum (pretend to chew)
Playing with my yoyo-WOO WOO (act like you are playing with a yoyo)
And along comes Herman the snake. (do your index finger like a crawling snake)
And he was this big. (hold your hands or fingers close together)
I said, "Herman, what happened?"
And he said, "I burped!"

Adapted from "Herman the Worm" by Angel Herring
http://www.teachers.net/lessons/posts/429.html